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SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT,  
SOUTHERN SINKIANG PROVINCE, 27 OCTOBER 1975

K. J. Hill, et al

Teledyne Geotech

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13 January 1976

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Southern Sinkiang Province, 27 October 1975**

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January 1976

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SDCS EVENT REPORT NO. 45

Southern Sinkiang Province, 27 October 1975

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	"P" Arrival	Origin Time	Lat.	Long.	$m_b$	$M_s$
NORSAR	01:08:47.7	00:59:51	41 N	089 E	4.4	N/A

Using HN-ME, LASA and NORSAR, the epicenter location and magnitudes become

01:00:05.2    42.5N    088.5E    4.9    N/A

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at HN-ME, LASA and NORSAR. High-level background noise prevented determination of signal arrivals at WH2YK and RK-ON. Horizontal SP channels at WH2YK, FN-WV, HN-ME and CPSO were rotated. Rotation of horizontal SP channels at RK-ON could not be accomplished because the SP transverse channel was inoperative.

No long-period signals were recorded at the SDCS stations, ALPA, LASA and NORSAR. All SDCS stations had high level background motion. Horizontal LP channels at CPSO, FN-WV and WH2YK were rotated. Rotation of LP horizontal channels at HN-ME could not be accomplished because of unknown operating gain of the LP radial channel. At RK-ON horizontal LP channels were not rotated because the LP transverse channel was inoperative. Validity of the ALPA and NORSAR long-period vertical beams is uncertain. LASA long-period array data are recoverable in 6 minutes 40 seconds segment lengths; one segment is included in this report.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of LASA and NORSAR short-period plots. LASA SP scaling factors are millimicrons per inch. Scaling factors are not reported for NORSAR short-period.

## STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES DEG MN SEC'S	ELEVATION METERS	INSTRUMENTATION SHORT-PERIOD LONG-PERIOD
ALPA	Alaska	65 14 00.0 N 147 44 36.0 W	626	None 31300
CPSO	McMinnville, Tennessee	35 35 41.4 N 085 34 13.5 W	574	6480 V 7515 H SL210 V SL220 H
FN-WV	Franklin, West Virginia	38 32 58.0 N 079 30 47.0 W	910	KS36000 KS36000
LASA	Billing's, Montana	46 41 19.0 N 106 13 20.0 W	744	HS10 7505A V 8700C H
HN-ME	Houlton, Maine	46 09 43.0 N 067 59 09.0 W	213	18300 SI.210 V 5L220 H
NORSAR	Kjeller, Norway	60 49 25.4 N 010 49 56.5 E	379	HS10 7505A V 8700C H
RK-ON	Red Lake, Ontario	50 50 20.0 N 093 40 20.0 W	366	18300 SL210 V SL220 H
WH2YK	White Horse, Yukon	60 41 41.0 N 134 58 02.0 W	853	18300 SL210 V SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be  $316^\circ \pm 5^\circ$  based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

27 OCT 75

T R I X

STATION	YR DOY	ARR TIME
HN-ME	75 300	1 13 2.5
NAO	75 300	1 8 47.7
LD2	75 300	1 13 8.0

YR DOY	O-TIME	LAT	LONG
75 300	1 2 25.9	68.199N	86.683E
75 300	1 0 5.2	42.491N	88.472E

T R I X

## DATA SUMMARY

27 OCT 75

S a.	Phase	Arrival Time	Inst.	Per	A/T	Magnitude*		Dist.**
						$m_b$	$M_s$	
NAO	EP	01:08:47.7	AB	0.5	6.	4.37	--	48.1
HN-ME	EP	01:13:02.5	SPZ	0.5	20.	5.02	--	88.3
LD2	EP	01:13:08.0	AB	1.1	43.	5.33	--	90.0

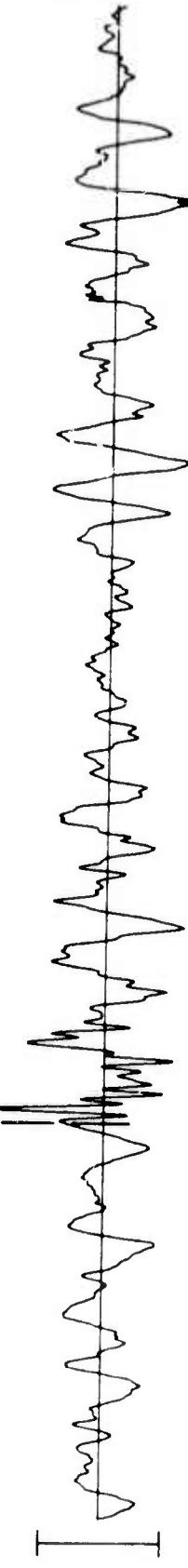
Average  $m_b$  = 4.91

\* For event source at surface

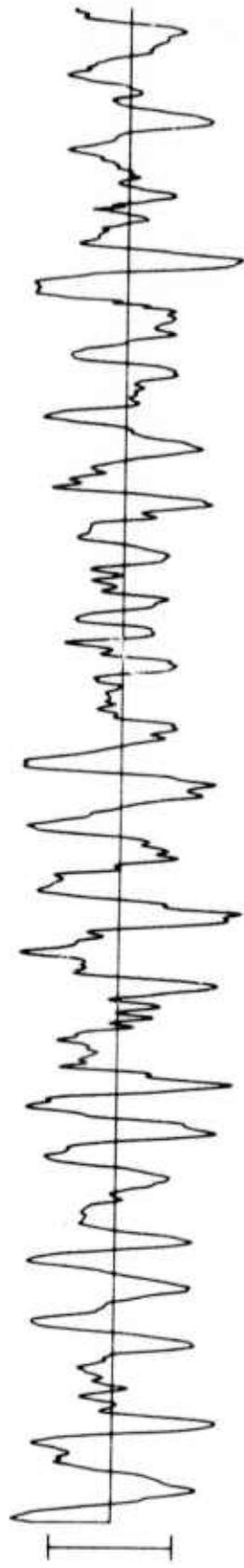
\*\* Distances are calculated to TRIX epicenter

**HN-ME 27 OCT 75**

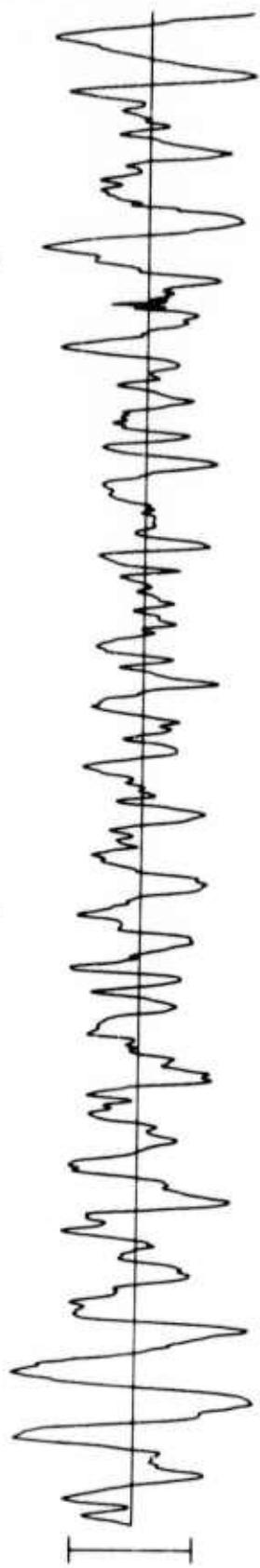
**01:13:02.5**



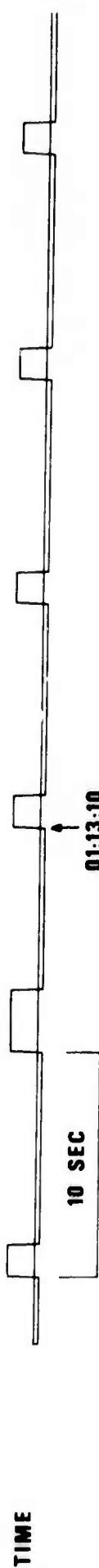
**SPZ  
29.66 MHz**



**SPR  
18.68 MHz**



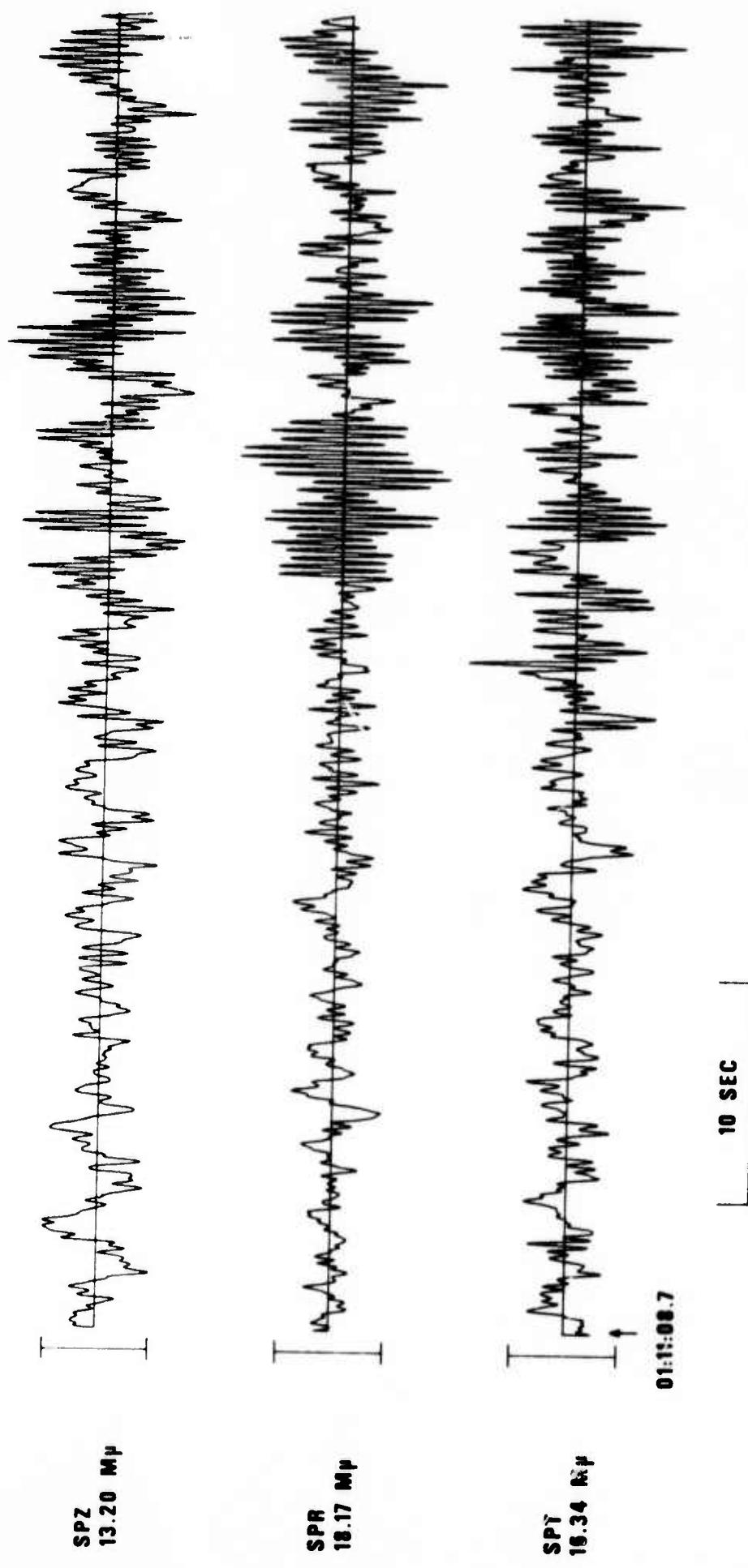
**SPT  
17.73 MHz**



**TIME**

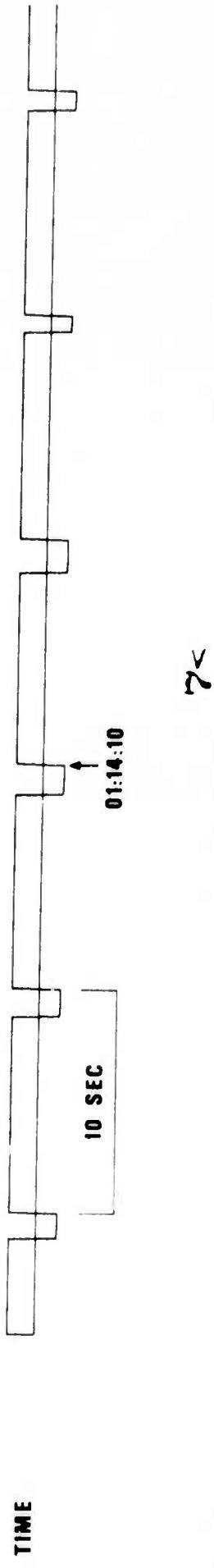
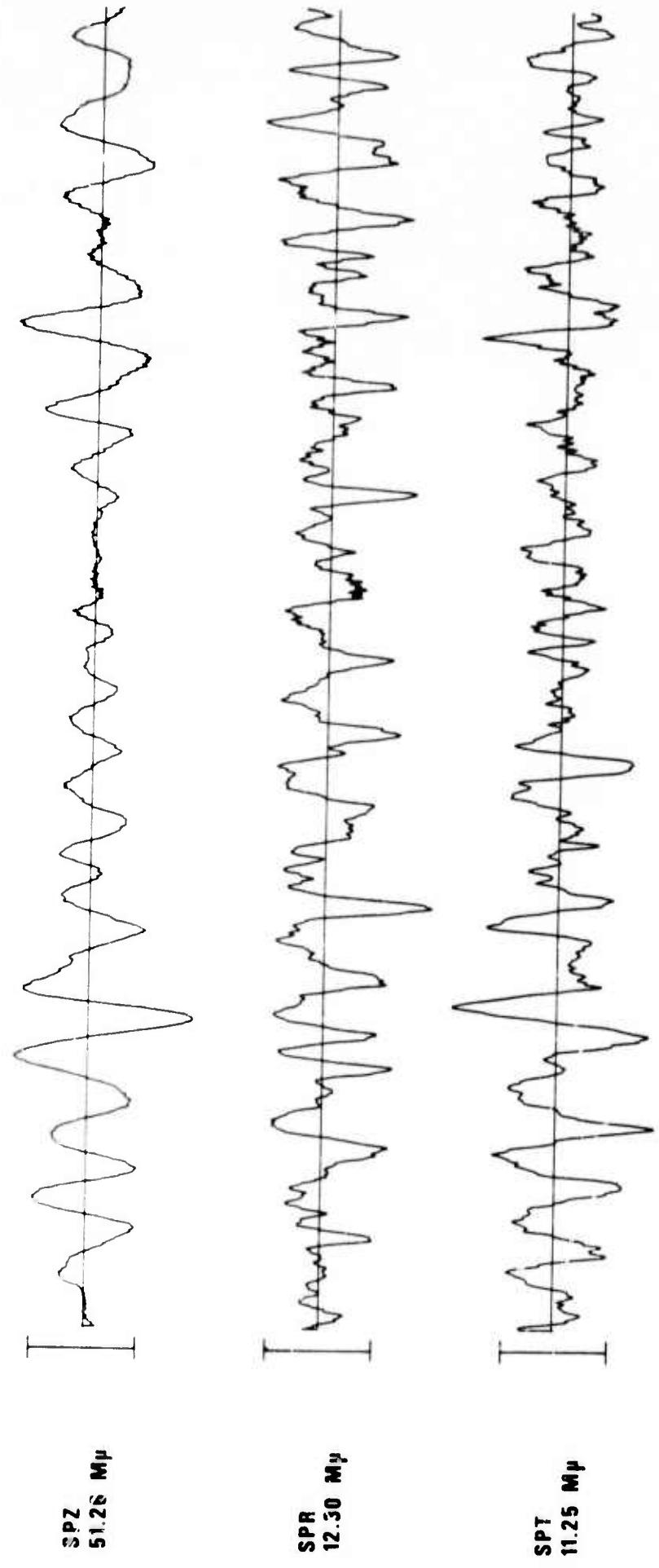
**5<**

WH2YK 27 OCT 75



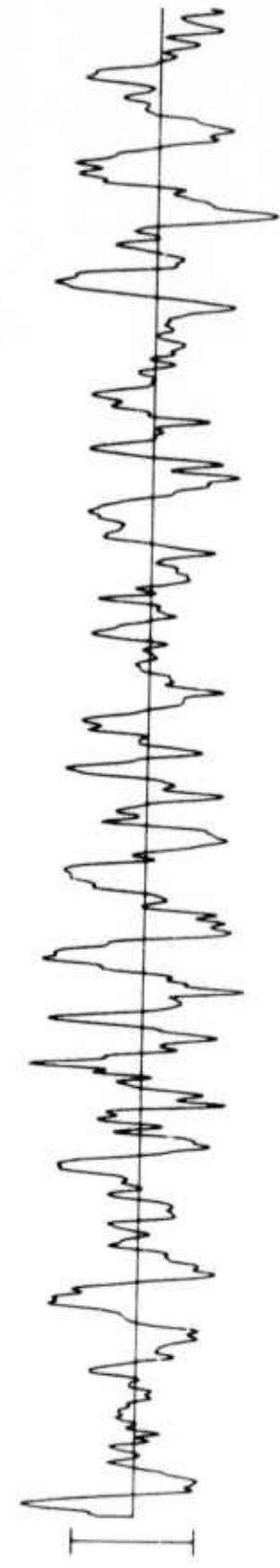
6<

CPSO 27 OCT 75

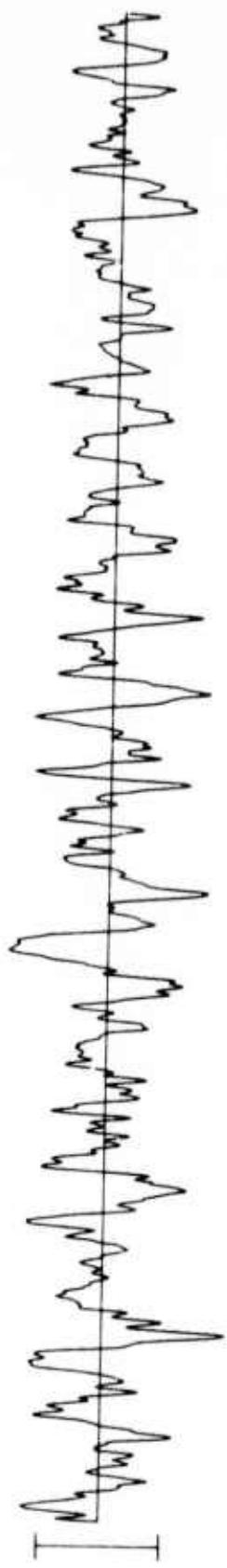


2c

RK-ON 27 OCT 75



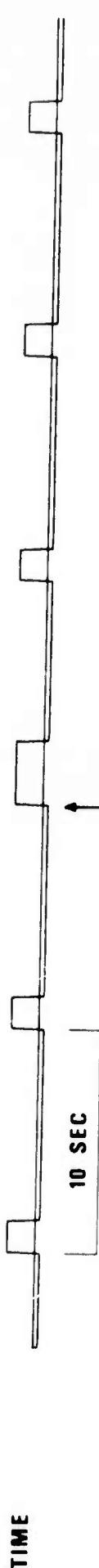
SPZ  
16.74 M $\mu$



SPR  
14.32 M $\mu$



SPT  
INOPERATIVE



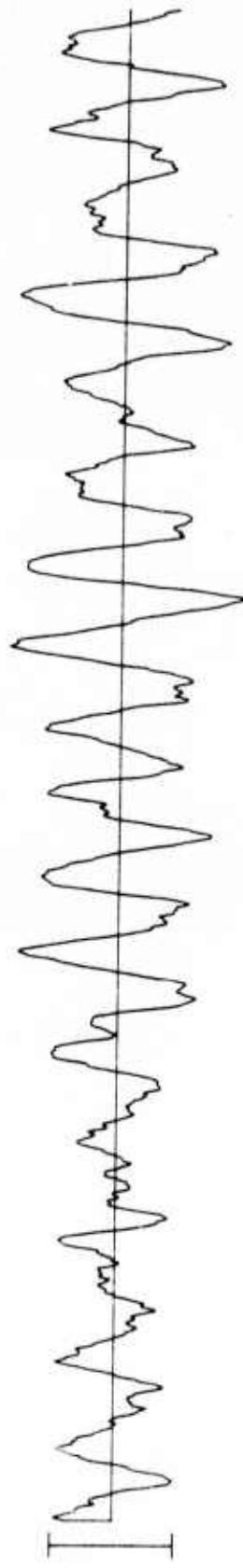
01:13:00

10 SEC

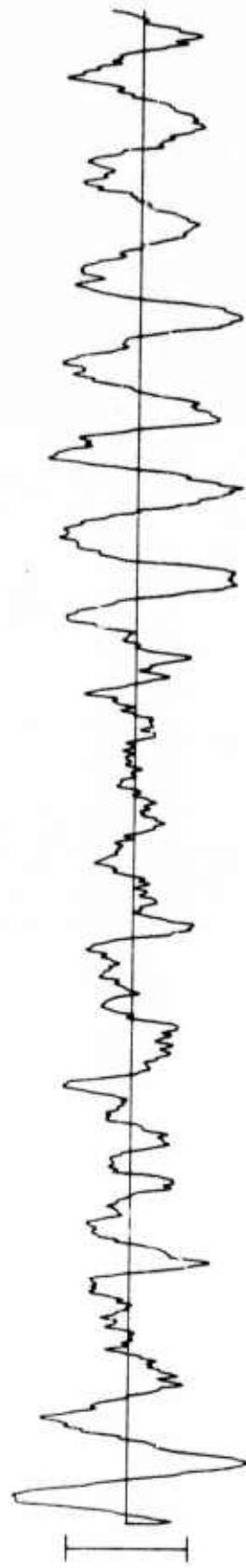
8<

**FN-WV 27 OCT 75**

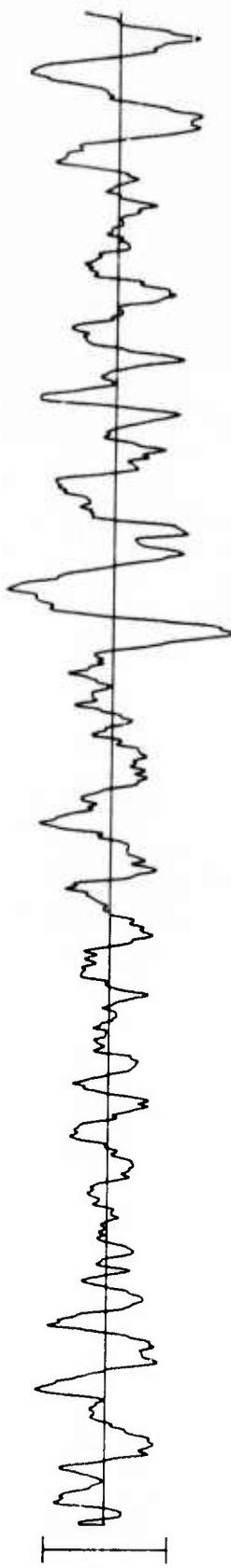
**SPZ  
16.59 M $\mu$**



**SPR  
13.15 M $\mu$**



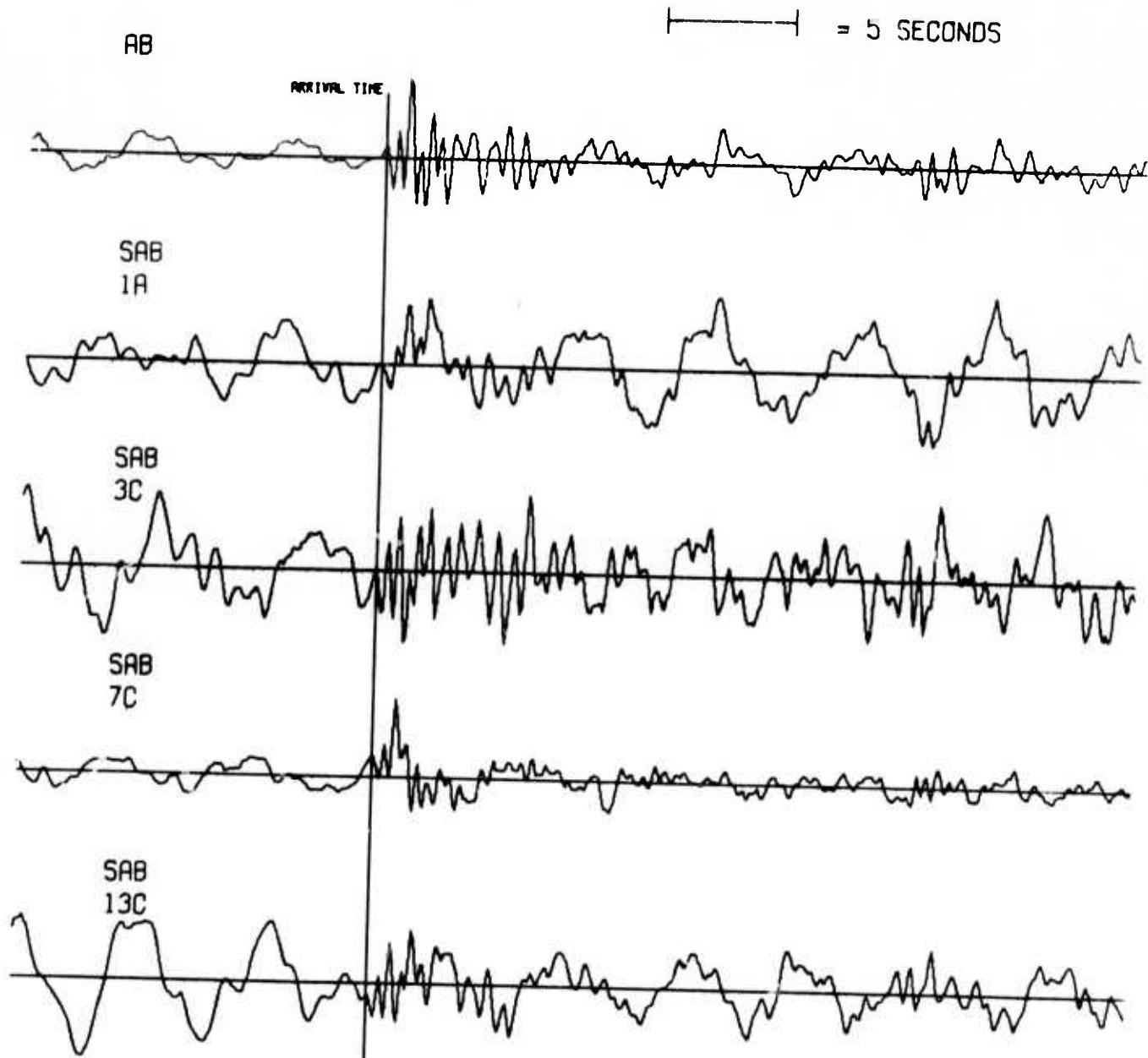
**SPT  
12.85 M $\mu$**



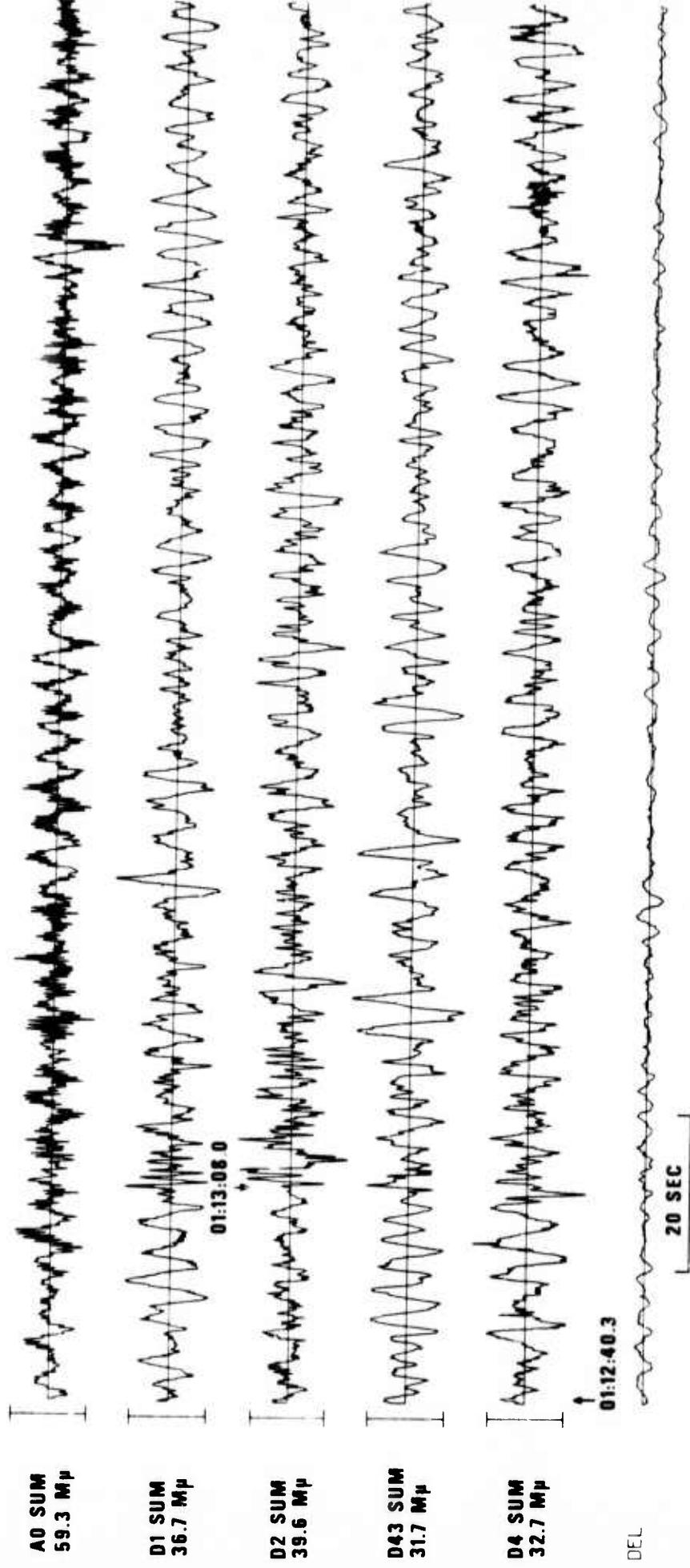
## NORSAR EVENT FILE

27 OCT 75

EPX NO. 47500 ARR. 1.8.47.8 46.7N 86.9E 4.5Km 33KM  
DIST = 50.0 AZI = 76.3 AMP = 2.8 PER = 0.4

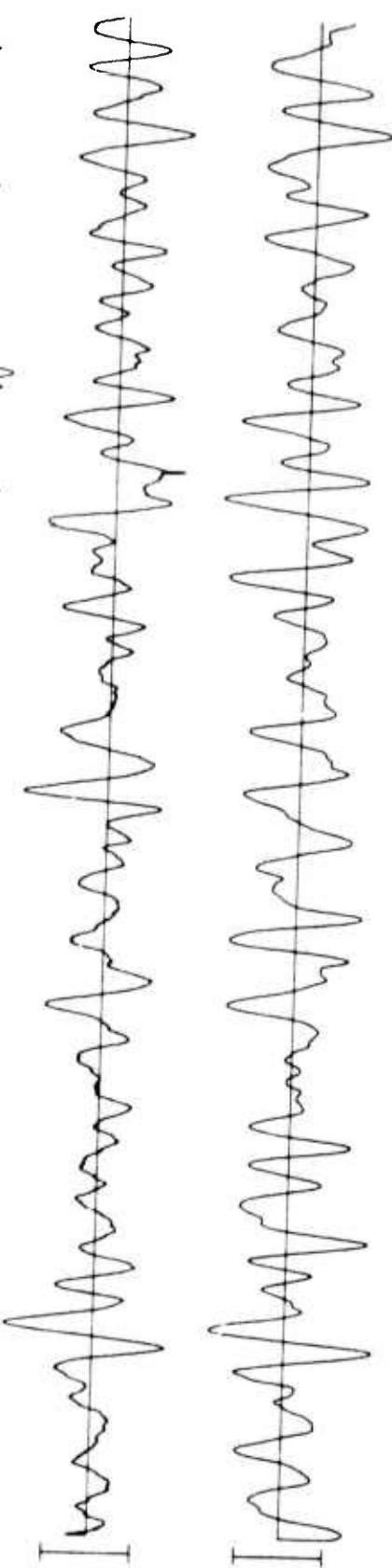
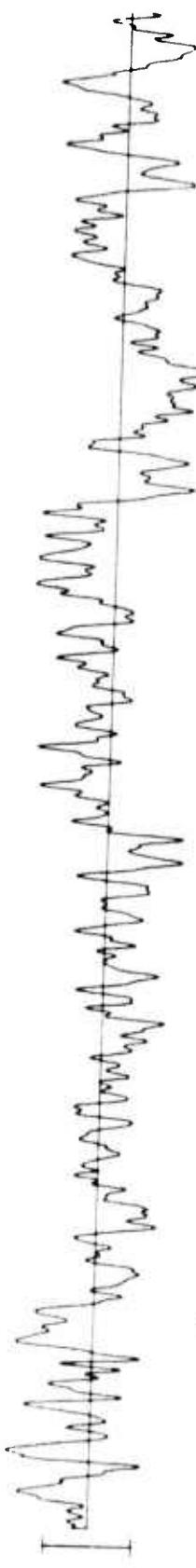


LASA INFINITE VELOCITY SUBARRAY SUMS 27 OCT 75



WH2YK 27 OCT 75

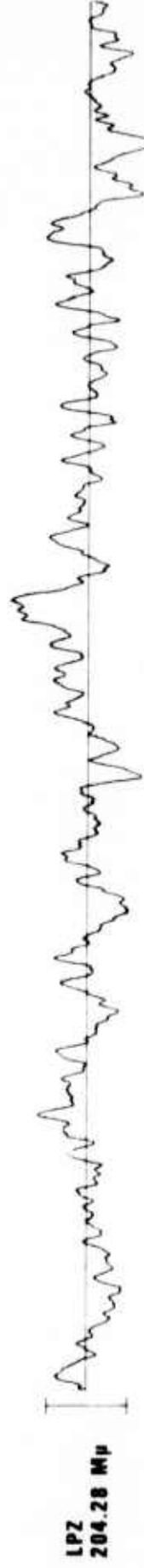
LPT  
459.66 M $\mu$   
512.11 M $\mu$



TIME  
2 MIN  
01:40:00

12<

CPSO 27 OCT 75



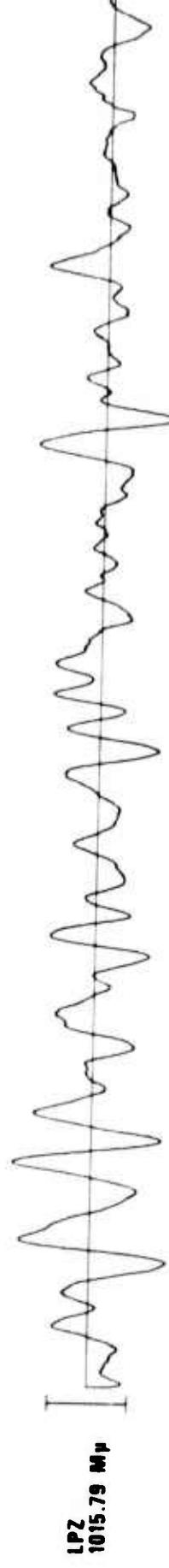
TIME

2 MIN

02:00:00

13<

HN-ME 27 OCT 75



TIME

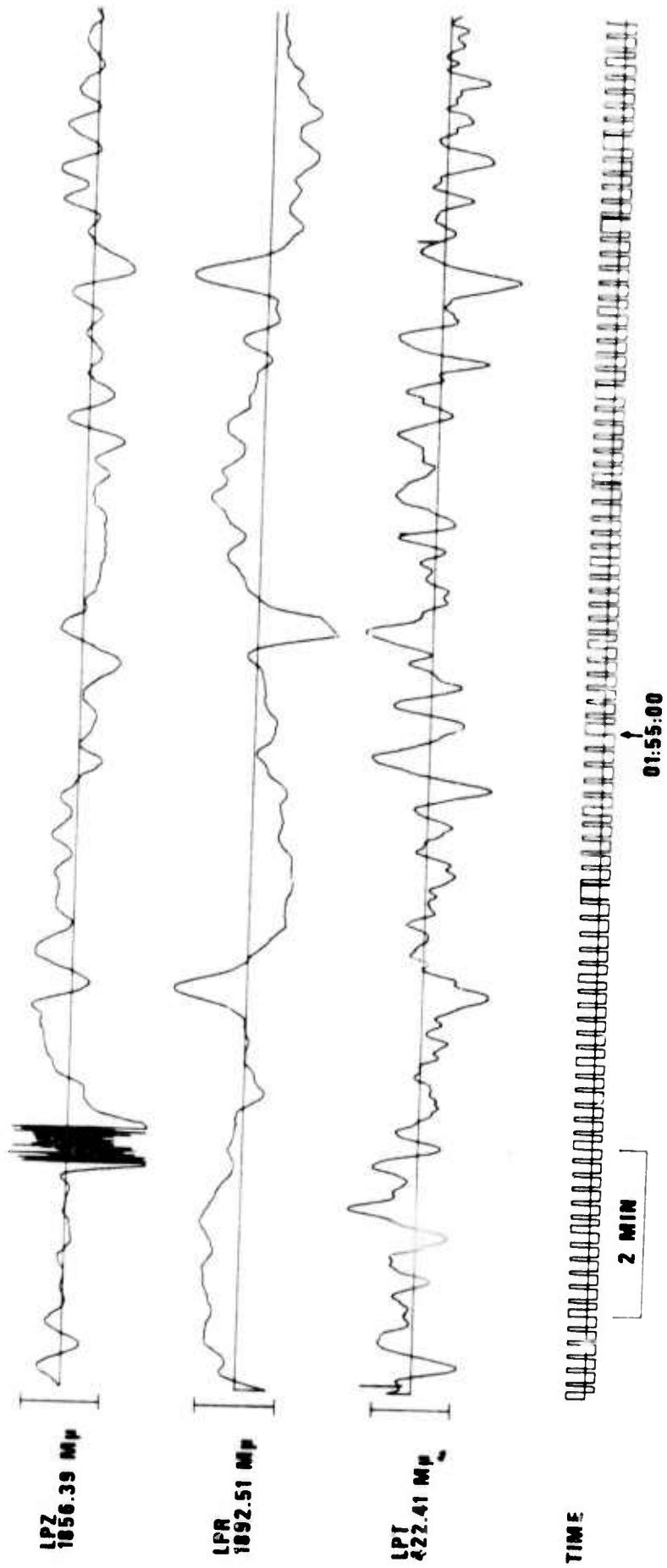
01:50:00

2 MIN

INVALID CALIBRATION

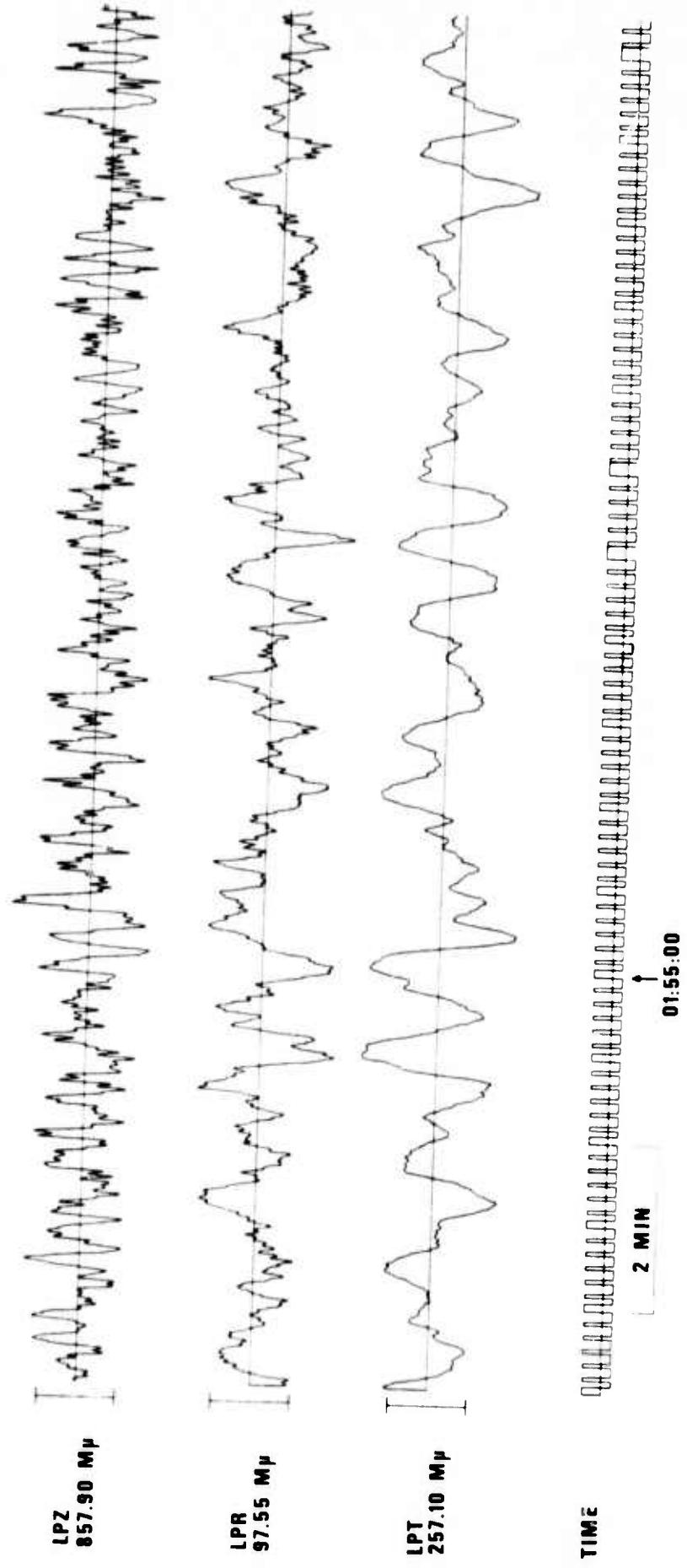
14<

RK-ON 27 OCT 75



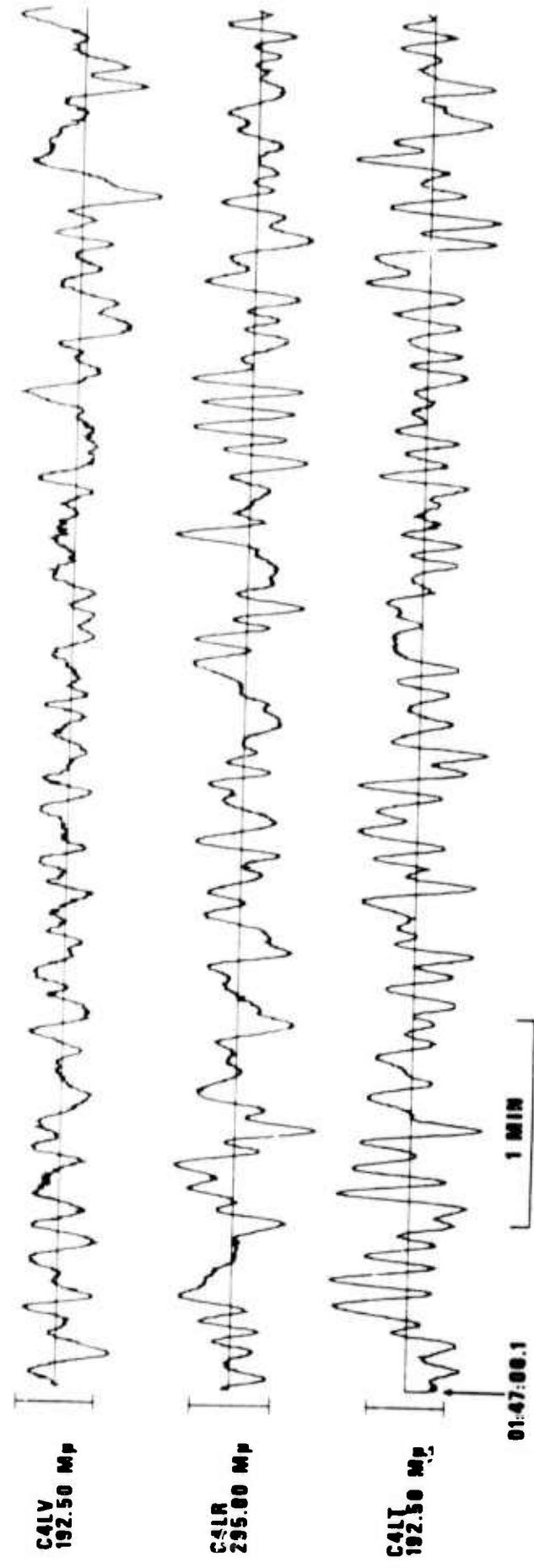
15 >

FN-WV 27 OCT 75



16<

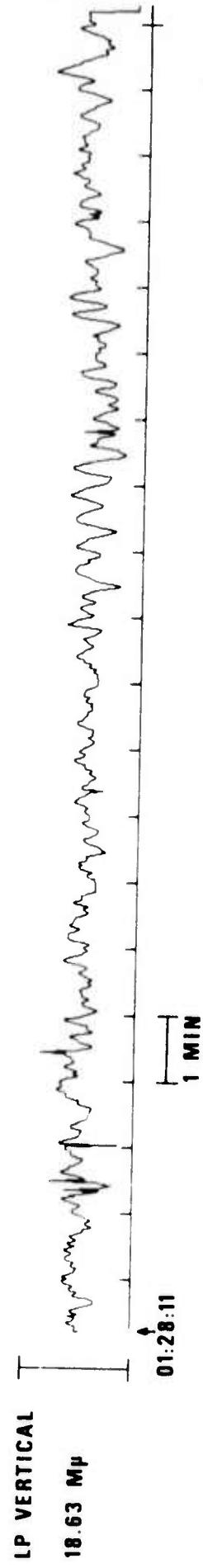
LASA LONG PERIOD C4 SUBARRAY 27 OCT 75



17c

ARRAY LONG PERIOD VERTICAL BEAMS 27 OCT 75

ALPA



NORSAR

